AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-5. (Cancelled).
- 6. (Currently Amended) A process for reducing NO_x emissions in a gaseous combustion effluent stream containing oxides of nitrogen NO and NO₂ and for producing a potassium nitrate fertilizer as a byproduct comprising the steps of:
- a) adding hydrogen peroxide in aerosol form to the effluent stream in sufficient amounts to generate nitric acid by first stage reactions as follows:

$$2NO + H_2O_2 + O_2$$
 -----> $2HNO_3$
 $2NO_2 + H_2O_2$ ----> $2HNO_3$
 $2NO + 2NO_2 + O_2 + 2H_2O_2$ ---> $4HNO_3$; and thereafter

b) adding sufficient potassium hydroxide in particulate form to the stream to generate the potassium nitrate fertilizer in second stage reactions as follows:

$$2HNO_3 + 2KOH$$
 -----> $2KNO_3 + 2H_2O$ $4HNO_3 + 4KOH$ ----> $4KNO_3 + 4H_2O$.

- 7. (Original) The process of claim 6 wherein NO_x emissions are reduced to a level below 40 ppm.
- 8. (Currently Amended) A process for reducing NO_x emissions in a gaseous combustion effluent stream from a land-based gas turbine containing oxides of nitrogen NO

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and NO₂ and for producing a potassium nitrate fertilizer as a byproduct comprising the steps of:

a) adding hydrogen peroxide to the effluent stream in sufficient amounts to generate nitric acid by first stage reactions as follows:

$$2NO + H_2O_2 + O_2$$
 -----> $2HNO_3$
 $2NO_2 + H_2O_2$ ----> $2HNO_3$
 $2NO + 2NO_2 + O_2 + 2H_2O_2$ ---> $4HNO_3$; and thereafter

b) adding sufficient potassium hydroxide to the stream to generate the potassium nitrate fertilizer in second stage reactions as follows:

$$2HNO_3 + 2KOH$$
 -----> $2KNO_3 + 2H_2O$ $4HNO_3 + 4KOH$ ----> $4KNO_3 + 4H_2O$.

- 9. (Original) The process of claim 8 wherein the hydrogen peroxide is added in aerosol form.
- 10. (Currently Amended) The process of claim 8 wherein the potassium hydroxide is added to the stream in particulate form.
- 11. (Original) The process of claim 8 wherein NO_x emissions are reduced to a level below 40 ppm.